

CLAIMS

What is claimed is:

- 1 1. A method of calling basic input/output system (BIOS) routines, the method comprising:
2 identifying BIOS routines with a unique identification number;
3 correlating the unique identification number to at least a service number in a data table;
4 determining, by a BIOS calling program, a services number of the BIOS routine based on
5 the unique identification number from the data table; and then
6 calling, by the BIOS calling program, the BIOS routine based on the service number.
- 1 2. The method of calling BIOS routines as defined in claim 1 wherein determining a services
2 number of the BIOS routine based on the unique identification number from the data table further
3 comprises accessing the data table by the BIOS calling program based on the unique identification
4 number to determine a services number associated with the unique identification number.
- 1 3. The method of calling BIOS routines as defined in claim 1 wherein identifying BIOS
2 routines with a unique identification number further comprises identifying BIOS routines with a
3 Globally Unique Identifier (GUID) 128 bits in length.
- 1 4. The method of calling BIOS routines as defined in claim 3 wherein determining a services
2 number of the BIOS routine based on the unique identification number from the data table further
3 comprises accessing the data table by the BIOS calling program based on the GUID number to
4 determine a services number associated with the GUID.

1 5. A computer system comprising:
2 a central processing unit (CPU);
3 a main memory array;
4 a first bridge logic device coupling the CPU and the main memory array;
5 a graphics controller coupled to the first bridge logic device;
6 a video display coupled to the graphics controller;
7 a second bridge logic device coupled to the first bridge logic device by way of a primary
8 expansion bus;
9 a basic input/output system (BIOS) read only memory (ROM) coupled to the second bridge
10 logic device by way of a secondary expansion bus; and
11 a data table stored within the BIOS ROM, and wherein data table correlates unique
12 identification numbers of BIOS routines to BIOS call services numbers for the BIOS routines.

1 6. The computer system as defined in claim 5 wherein the unique identification numbers of
2 the BIOS routines further comprise Globally Unique Identification (GUID) numbers
3 approximately 128 bits in length.

1 7. The computer system as defined in claim 5 further comprising:
2 a driver program executed by the CPU, the driver program adapted to execute BIOS
3 routines; and
4 wherein the driver program accesses the data table to determine a BIOS call service
5 number for a BIOS routine based on the unique identification number.

1 8. The computer system as defined in claim 7 wherein the unique identification numbers of
2 the BIOS routines further comprises Globally Unique Identification (GUID) numbers
3 approximately 128 bits in length.

1 9. A method of determining availability of basic input/output system (BIOS) routines in a
2 computer system, the method comprising:

3 identifying a first BIOS routine with a first globally unique identification number;

4 maintaining within the computer system a data table that lists globally unique identification
5 numbers for available BIOS routines; and

6 determining the availability of the first BIOS routine by searching the data table based on
7 the first globally unique identification number, presence of the first globally unique identification
8 number indicating availability of the first BIOS routine in the computer system.

9 10. The method as defined in claim 9 wherein identifying the first BIOS routine with the first
10 globally unique identification number further comprises identifying the first BIOS routine with the
11 first globally unique identification number being approximately 128 bits in length.

1 11. The method as defined in claim 9 wherein maintaining within the computer system a data
2 table that lists globally unique identification numbers for available BIOS routines further
3 comprises maintaining the data table on a non-volatile device.

1 12. The method as defined in claim 11 wherein maintaining the data table on a non-volatile
2 device further comprises maintaining the data table on a BIOS read only memory (ROM).

1 13. The method as defined in claim 9 further comprising determining a BIOS call services
2 number of the BIOS routine based on the globally unique identification number.

1 14. The method as defined in claim 13 wherein determining a BIOS call services number of the
2 first BIOS routine based on the globally unique identification number further comprises:

3 correlating the globally unique identification number of the first BIOS routine to the BIOS
4 call services number of the first BIOS routine in the data table; and

5 searching the data table based on the globally unique identification number of the first
6 BIOS routine to determine the BIOS call service number of the first BIOS routine.

1 15. The method as defined in claim 14 wherein identifying the first BIOS routine with a
2 globally unique identification number further comprises identifying the first BIOS routine with the
3 globally unique identification number being approximately 128 bits in length.

4 16. The method as defined in claim 15 wherein maintaining within the computer system a data
2 table that lists globally unique identification numbers for available BIOS routines further
3 comprises maintaining the data table on a non-volatile device.

1 17. The method as defined in claim 16 wherein maintaining the data table on a non-volatile
2 device further comprises maintaining the data table on a BIOS read only memory (ROM).

1 18. A basic input/output system (BIOS) read only memory (ROM) for a computer system
2 comprising:
3 a set of BIOS routines stored on the BIOS ROM, each BIOS routine invoked by a service
4 number; and
5 a correlation table stored on the BIOS ROM, the correlation table correlates a Globally
6 Unique Identifier (GUID) to a service number for at least one BIOS routine.

1 19. The BIOS ROM as defined in claim 18 wherein the GUID is a number generated based in
2 part on a random number of sufficient length to be approximately globally unique.

1 20. The BIOS ROM as defined in claim 19 wherein the GUID is approximately 128 bits in
2 length.

1 21. A method of calling basic input/output system (BIOS) routines, the method comprising:
2 identifying a plurality of BIOS routines with unique identification numbers;
3 correlating the unique identification numbers to BIOS routine service numbers in a data
4 table;
5 determining, by a driver program, from the data table a service number of a first BIOS
6 routine based on a first unique identification number for the first BIOS routine; and then
7 calling the first BIOS routine based on the service number.

1 22. The method of calling BIOS routines as defined in claim 21 wherein correlating the unique
2 identification numbers to BIOS routine service numbers in a data table further comprises supplying

3 the data table listing the unique identification numbers, and for each identification number listing a
4 BIOS routine service number.

1 23. The method of calling BIOS routines as defined in claim 21 wherein determining, by a
2 driver program, from the data table a service number of a first BIOS routine based on the first
3 unique identification number further comprises accessing the data table based on the first unique
4 identification number to determine a service number associated with the first unique identification
5 number.

1 24. The method of calling BIOS routines as defined in claim 21 wherein identifying a plurality
2 of BIOS routines with unique identification numbers further comprises identifying the plurality of
3 BIOS routines each with a Globally Unique Identifier (GUID) approximately 128 bits in length.

1 25. The method of calling BIOS routines as defined in claim 24 wherein correlating the unique
2 identification numbers to BIOS routine service numbers in a data table further comprises supplying
3 the data table listing the GUID and service number for the plurality of BIOS routines.

1 26. The method of calling BIOS routines as defined in claim 25 wherein determining, by a
2 driver program, from the data table a service number of a first BIOS routine based on the unique
3 identification number further comprises accessing the data table based on a GUID of the first BIOS
4 routine to determine a service number associated with the GUID of the first BIOS routine.

1 27. A computer system comprising:
2 a central processing unit (CPU) means for executing software programs;
3 a main memory means for storing data and programs;
4 a first bridge logic means for coupling the CPU and the main memory means;
5 a graphics controller means coupled to the first bridge logic device, the graphics controller
6 means for controlling placing of text and images on a video display means;
7 the video display means for displaying text and images, the video display means coupled to
8 the graphics controller means;
9 a second bridge logic means for coupling secondary expansion buses to the first bridge
10 logic means, the second bridge logic means coupled to the first bridge logic means by way of a
11 primary expansion bus;
12 a basic input/output system (BIOS) read only memory (ROM) means for storing BIOS
13 routines, the BIOS ROM coupled to the second bridge logic means by way of a secondary
14 expansion bus; and
15 a data table means within the within the BIOS ROM means, the data table means for
16 storing unique identification numbers of BIOS routines correlated to BIOS call service numbers for
17 the BIOS routines.

1 28. The computer system as defined in claim 27 wherein the unique identification numbers of
2 the BIOS routines further comprise Globally Unique Identification (GUID) numbers
3 approximately 128 bits in length.

1 29. The computer system as defined in claim 27 further comprising:
2 a driver program means for calling BIOS routines, the driver program means executed by
3 the CPU means; and
4 wherein the driver program means further for accessing the data table means to determine a
5 BIOS call service numbers for BIOS routines based on the unique identification numbers.

1 30. The computer system as defined in claim 29 wherein the unique identification numbers of
2 the BIOS routines further comprises Globally Unique Identification (GUID) numbers
3 approximately 128 bits in length.

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